

Amendments to the Specification:

The paragraph starting on page 2, line 9, is amended herein and now reads as follows:

-- ~~The not-yet published German patent application~~
~~DE 100 09 065.6~~ United States patent application
publication 2003/0159677 describes a method and an arrangement for monitoring the effects of a cylinder equalization control. Corresponding to the introduction of the description, it is a special requirement for a direct-injecting spark-ignition engine. Here, an increased rough running can occur caused by a low tolerance compatibility of the combustion process in stratified operation and/or because of tolerances of the high pressure injection valves which are used or in the distribution of the fuel to the individual cylinders. Also, deterioration-caused changes of the throughflow characteristics of the high pressure injection valves can have an effect. In the context of ~~DE 100 09 065.6~~ United States patent application publication 2003/0159677, preferably the torque contribution (actual torque) of a cylinder relative to its ignition predecessor is detected (that is, no absolute torque determination) via an evaluation of the time-dependent trace of the crankshaft rotation or camshaft rotation. Improvements in the area of cylinder equalization are achieved in that a monitoring of the effects for the cylinder equalization control is provided and in that a corresponding fault signal is generated for disturbances in the area of the cylinder equalization control. The monitoring of the effects takes place in such a

manner that the cylinder-individual torque contributions can be checked after a completed cylinder equalization control intervention to determine if the control shows an effect. If the effect does not occur to the extent ~~as~~ wanted, the control loop amplification of the cylinder-individual PI controllers is successively reduced to a pregiven end value. The control thereby functions with greater robustness but is dynamically slower which is accepted. If the wanted effect does not occur after adjusting the PI controllers to the pregiven end value, then a fault signal is generated. --

The paragraph starting on page 3, line 10, is amended herein and now reads as follows:

-- The disclosure of the last-mentioned ~~German patent application DE 100 09 065.6~~ United States patent application publication 2003/0159677 is expressly incorporated into this application. --

The paragraph starting on page 4, line 4, is deleted.

The paragraph starting on page 5, line 14, is amended herein and now reads as follows:

-- In a second operating mode, the homogeneous operation of the engine 1, the throttle flap 12 is partially opened or closed in dependence upon the desired supplied air mass. The fuel is injected into the combustion chamber 4 by the injection valve 8 during an induction phase caused by the piston 2. Because of the simultaneously inducted air, the injected fuel is swirled and it

is thereby essentially uniformly distributed in the combustion chamber 4. Thereafter, the air/fuel mixture is compressed during the compression phase in order to then be ignited by the spark plug 9. The piston 2 is driven with the expansion of the ignited fuel. --

The paragraph starting on page 7, line 1, is amended herein and now reads as follows:

-- Step 215 is described in FIG. 2. In this step, an inquiry is made as to the effect of the cylinder equalization control and is based, for example, on the method for monitoring the effects of a cylinder equalization control described in ~~the non-published German patent application DE 100 09 065.6~~ United States patent application publication 2003/0159677. The input data needed herefor are supplied by the rpm sensor 15 to the control apparatus 16, which, on this basis, undertakes the control/adaptation of the cylinder-individual torque contributions. For this purpose, for example, the injected fuel quantity TI, the ignition time point ZW, the exhaust-gas recirculation rate (not shown in FIG. 2) or the injection ~~position TF~~ position DK is varied by the control apparatus 16. --

The paragraph starting on page 9, line 27, is amended herein and now reads as follows:

-- If combustion misfires were detected in step 240 also in homogeneous operation, then, in step 270, a further diagnostic method is started. The combustion misfires, in this case, cannot be caused exclusively by deposits on the nozzles of the injection

valves. For example, these combustion misfires can also be caused by an injection valve 8, which no longer opens in a controlled ~~manner~~ manner, or by a defective spark plug 9. A coking of the injection ~~valves 9~~ valves 8 can, in this case, not be completely precluded. In any case, the reasons for these combustion misfires must be narrowed by further diagnostic methods. A corresponding storage of the faults in a fault memory can be helpful in a later repair in order to obtain a precise diagnosis. --